

# **Air Quality Permitting** Statement of Basis

**January 17, 2005** 

Permit to Construct No. P-050402

Glenns Ferry Cogeneration Partners, Ltd. Glenns Ferry, ID

Facility ID No. 039-00017

Prepared by:

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**FINAL** 

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## Acronyms, Units, and Chemical Nomenclatures

acfm actual cubic feet per minute

AFS AIRS Facility Subsystem

AIRS Aerometric Information Retrieval System

AQCR Air Quality Control Region
CFR Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality
EPA U.S. Environmental Protection Agency

HAPs Hazardous Air Pollutants

IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance

with the Idaho Administrative Procedures Act

lb/hr pound per hour

MACT Maximum Achievable Control Technology

MMBtu/hr million British thermal units per hour

NESHAP National Emission Standards for Hazardous Air Pollutants

NO<sub>x</sub> nitrogen oxides

NSPS New Source Performance Standards

PM<sub>10</sub> particulate matter with an aerodynamic diameter less than or equal to a nominal 10

micrometers

PSD Prevention of Significant Deterioration

PTC permit to construct

Rules Rules for the Control of Air Pollution in Idaho

SIC Standard Industrial Classification

SIP State Implementation Plan

SM Synthetic Minor SO<sub>2</sub> sulfur dioxide T/yr tons per year

VOC volatile organic compound

#### 1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing permits to construct.

#### 2. FACILITY DESCRIPTION

Glenns Ferry Cogeneration Partners, Ltd. (the cogeneration facility) generates electricity that is sold to Idaho Power and exports waste heat to heat recovery boilers for use as process steam by Idaho Fresh-Pak, Inc.

#### 3. FACILITY / AREA CLASSIFICATION

The cogeneration facility alone is not a major facility as defined in IDAPA 58.01.01.205 or 008.10. It is not a designated facility as defined in IDAPA 58.01.01.006.27. The turbine is an affected facility and subject to federal regulation in accordance with 40 CFR 60 Subpart GG (Standards of Performance for Stationary Gas Turbines). The primary SIC code defining the Glenns Ferry Cogeneration facility is 4911. The AIRS classification for this facility is defined as "SM." The AIRS data entry table is provided in Section 9 of the statement of basis. Per information submitted by Glenns Ferry Cogeneration Partners, Ltd on April 18, 2005, the cogeneration facility at Glenns Ferry is not subject to 40 CFR 63 Subpart YYYY.

The facility is located within AQCR 63 and UTM zone 11. The Glenns Ferry Cogeneration facility is located in Glenns Ferry, Idaho, which is located in Elmore County. The area is designated as unclassifiable area for all regulated criteria air pollutants. (PM<sub>10</sub>, CO, NO<sub>x</sub>, SO<sub>2</sub>, lead, and ozone).

The AIRS information that provided in Section 9 of the statement defines the classification for each regulated air pollutant at the facility. This required information is entered into the EPA AIRS database.

#### 4. APPLICATION SCOPE

The Department of Environmental Quality (DEQ) received an application from Glenns Ferry Cogeneration Partners, Ltd. on January 10, 2005. Glenns Ferry Cogeneration Partners, Ltd. requested DEQ to revise PTC No. 039-00017, issued August 12, 1998. The following list identifies the changes made for this permit revision:

- Mailing address changed to 811 South Oneida, Rupert, ID 83347
- Facility contact changed to Mr. Chris Harriman, Plant Manger; 208-436-1596
- Responsible official changed to Mr. Chris Harriman, Plant Manger; 208-436-1596
- Plant name changed to Idaho Fresh-Pak, Inc., to which Glenns Ferry Cogeneration Partners, Ltd. exports waste heat
- The monitoring requirement for sulfur and nitrogen contents of the fuel revised to reflect the changes in 40 CFR 60 Subpart GG and EPA's November 11, 1996 letter to the permittee.

## 4.1 Application Chronology

January 10, 2005	DEQ received the PTC application from Glenns Ferry Cogeneration Partners, Ltd.
February 9, 2005	DEQ declared the application complete.

April 18, 2005 The applicant submitted additional information regarding 40 CFR 60

Subpart GG and Subpart YYYY.

March 13, 2005

DEQ issued letter of condition approval of permit and processing fee

December 8, 2005

DEQ received processing fee

#### 5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this PTC action.

## 5.1 Equipment Listing

There is no change to the equipment.

Solar Mars 100-T15000S natural gas-fired turbine is equipped with a solar SoLoNO<sub>x</sub> combustor to reduce NO<sub>x</sub> and CO emissions. The pollution control efficiency is 80% and is manufacturer guaranteed.

Maximum Heat Rate:

97.66 MMBtu/hr (input)

Stack Height:

60 feet

Stack Diameter:

6 feet

Exhaust Flowrate:

109,298 acfm

**Exhaust Gas Temperature:** 

317°F

## 5.2 Emissions Inventory

There is no change to the emissions.

## 5.3 Modeling

There is no change to the emissions. Therefore, modeling is not needed.

## 5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this PTC.

#### IDAPA 58.01.01.209.04 Revisions of Permits to Construct

"The Director may approve a revision of any permit to construct provided the stationary source or facility continues to meet all applicable requirements of Sections 200 through 228. Revised permits will be issued pursuant to procedures for issuing permits (Section 209), except that the requirements of Subsections 209.01.c., 209.02.a., and 209.02.b., shall only apply if the permit revision results in an increase in emissions authorized by the permit or if deemed appropriate by the Director."

The applicant requested to revise PTC No. P-980049, issued August 12, 1998, as described in this document. Because there is not an increase in emissions, an opportunity for public comment is not required, nor is a public comment period.

#### 5.5 Permit Conditions Review

This section describes only those permit conditions that have been revised, modified or deleted as a result of this permit action. All other permit conditions remain unchanged.

5.5.1 The "Procedures Manual for Air Pollution Control" is no longer used for visible emissions determination. IDAPA 58.01.01.625 is used instead. Permit Conditions 2.4 (former Permit Condition 1.4) and 2.12 (former permit condition 3.3) are revised to reflect this change.

- 5.5.2 Per the information submitted by the applicant on April 18, 2005, Permit Condition 2.11 (former Permit Condition 3.2) is revised to reflect the changes in 40 CFR 60 Subpart GG and the EPA's November 11, 1996 letter to the permittee.
- 5.5.3 Per the information provided by Boise Regional Office on January 12, 2005, the applicant has fulfilled initial performance test requirement in Permit Condition 2.12 (former Permit Condition 3.3). The following sentence is added to the end of the permit condition: "The permittee conducted the initial performance test between July and September 1997. The permittee has fulfilled this permit requirement."
- 5.5.4 Former Permit Conditions 4.1 and 4.2 are removed from the permit revision because the initial performance requirement has been fulfilled.
- 5.5.5 Process description and emissions control description are added to the permit revision as Permit Conditions 2.1 and 2.2.
- 5.5.6 The permit revision is issued using the current template. The following table provides permit numbering cross reference between the permit revision and the former permit.

PERMIT NUMBERING CROSS REFERENCE BETWEEN THE REVISION AND THE FORMER PERMIT

Former Permit Number	Permit Revision Permit Number	Former Permit Number	Permit Revision Permit Number	Former Permit Number	Permit Revision Permit Number
	2.1		2.2	3.2	2.11
1.1	2.3.1	2.2	2.6	3.3	2.12
1.2	2.3.2	2.3	2.7	4.1	
1.3	2.3.3	2.4	2.8	4.2	
1.4	2.4	2.5	2.9	4.5	2.13
2.1	2.5	3.1	2.10		

#### 6. PERMIT FEES

Glenns Ferry Cogeneration facility submitted a \$1,000 PTC application fee on January 10, 2005, in accordance with IDAPA 58.01.01.224. This is a permit revision to change the contact person, responsible official, the plant name to which Glenns Ferry Cogeneration Partners, Ltd. exports waste heat, and a mailing address. In accordance with IDAPA 58.01.01.225, the PTC processing fee is \$250. DEQ received the processing fee December 8, 2005.

#### 7. PERMIT REVIEW

## 7.1 Regional Review of Draft Permit

The final permit was sent to Boise Regional Office on March 25, 2005. Boise Regional Office responded with no comments through email on March 30, 2005.

## 7.2 Facility Review of Draft Permit

The applicant didn't request to review the facility draft permit.

#### 7.3 Public Comment

An opportunity for public comment and a public comment period was not required because emissions are not increasing.

## 8. RECOMMENDATION

Based on review of application materials, and all applicable state and federal rules and regulations, staff recommend that Glenns Ferry Cogeneration Partners, Ltd. be issued a final PTC No. P-050402 for the cogeneration facility. No public comment period is recommended, no entity has requested a comment period, and the project does not involve PSD requirements.

#### 9. AIRS INFORMATION

AIRS/AFS\* FACILITY-WIDE CLASSIFICATIOND DATA ENTRY FORM

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAP (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION A-Attainment U-Unclassified N- Nonattainment
SO <sub>2</sub>	В		В					U
NO <sub>x</sub>	SM		SM				SM	U
co	В							U
PM <sub>10</sub>	В							U
PT (Particulate)	В							
VOC	В							U
THAP (Total HAPs)								
			APPLICABLE SUBPART					
			GG		<del>- ::::: -</del>			

Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

## b AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, or each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of al! HAPs.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).

SYC/sd

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